Gent:n

The practice of Physic is that part of medical Science which treats of the causes - Symptoms - & cure of diseases. —

The causes have been divided into remote - predisposing - exciting - or occasional & proximate each of wch have been defined in our pathology.

Symptoms or signs of diseases are divided into 3 kinds. 1st of the remote cause as anginia in Plurisy. It is derived from y same remote cause on diseases

In a course of lectures, it is convenient to distinguish yn from each other & to foster this ipse. the former is called Diagnosis - the latter Prognosis.

my System of medicine renders the Diagnosis of but little consequence. — The indications of Cure as I shall say hereafter ~~do~~ arise not so much from the seat of a Disease as from general the State of the System. The Prognosis shall have its due weight in our lectures. —

The principles I have adopted ren= =ders it unnecessary for me to adopt a new Order, for I reject — totally reject Dr Cullen's & all other nosological ar= =rangements of Diseases. Were I to follow the simplicity of my principles I should likewise reject all the usual names by which Diseases are designated, & treat of them all as morbid actions varied only by their seats, or force. — ~~But~~ For the

present I shall retain the usual names of diseases, but shall distinguish when they are Symptoms only of a disease. — I shall The order I shall pursue is the same, as that delivered in our Pathology. I shall begin th w: the diseases of the Animal System

The only division I shall wish to admit of diseases is into such as affect the whole, & such as affect a part of the System. But this is liable to objections - for genl diseases often terminate in such as are local. Local diseases pass into such as are general. —

Still less proper will be to describe diseases from the different Systems they affect, for there is no genral disease

The practice of Physic is that branch of medicine which treats of the causes & cure of diseases.

A Disease is that condition of the animal body in which the functions of the body or mind are not performed at all, or performed with difficulty.

The Causes of diseases are divided into remote predisposing - occasional & proximate.

Eg: Cold is the remote & predisposing cause of ~~Hæmoptysis~~ pleurisy. A blow, a fall, or violent exercise is the occasional cause - The rupture of a blood vessel is the proximate.

A Symptom is an apparent deviation from health, & is always obvious to the senses. - It is the Sign of a disease.

Symptoms are of 3 kinds. Symptoms

that does not affect 2, 3, or 4. and sometimes all the systems enumerated in our pathology. —

The disease called improperly fever. shall be the first subject of our

---

~~V~~ Symptoms appear in the animal - vital & natural functions. The animal are the organs of voluntary motions - sensations & intellectual operations.

The vital - are those which are supposed most essential to life - such as the motion of the heart - the circulation of the blood - & respiration.

The natural are dentition - appetite digestion - and the regular discharge of the faces. —

Distention: I say improperly called fever - for the word implies putrescent heat - how many fevers are so far from being accompanied by heat

of the disease. 2 Symptoms of the cause & 3 Symptoms of Symptoms. The 1st are Symptoms of the proximate cause. The 2nd of the remote cause - The 3d proceed from both & are neuralgy. pain - fever & cough are Symptoms of the cause in a pleurisy. If Coryza or Angina attend they are Symptoms of the remote cause. The difficult respiration is a Symptom of a Symptom viz pain.

Diagnosis

These Symptoms which taken collectively form the distinction of diseases constitute the diagnosis. Eg: Sickness at Stomach & the pain being seated in the small joints distinguish Gout from Rheumatism. —

Prognosis

Is a declaration of the issue of a disease taken from the State & degree of the Symptoms. —

Diseases are Idiopathic & Symptomatic.

that the heat is natural & sometimes diminished in them. It w^d nearly as proper to call a fever – a pain – a thirst – a want of appetite – for these are much symptoms of what is called fever as preternatural heat. You see here Gent: how much we are shut up as it were to truths in Medicine. Time will probably bury all the names of diseases in the same grave with the names of heathen

IV Diseases are general affecting the whole System, and from the same causes, and 2^ly local – affecting only particular parts of the System & from different cause. Eg fever – a general disease. Cancer or Schirrus a local disease. – They cannot be seperated in a course of Lectures. The same disease is often both general & local in its different Stages. E.G. Opthalmia. Phlegmon / gout. Then & not till

E.g. The angina is ~~only~~ an idiopathic disease.
Gluteus hystericus - a sympatic disease.
Diseases are natural & artificial
The natural diseases are chiefly fevers.
66,000 out of 100,000 diseases in Sydenham's time were fevers in London. At present out of 100,000 diseases only 10,000 belong to the class of fevers. Fevers - casualties - war & old age appear to be the only outlets of human life. —
The artificial diseases are the offspring of civilization. The neuroses or nervous dis=
=eases constitute a principal part of them.

The indications of cure are founded on a knowledge of the proximate cause of diseases. - E.g. ~~If~~ increased excite=
=ment is the cause of madness the indi=
=cation of cure is to reduce it by indirect stimuli or debilitating remedies.
Remedies are natural & artificial

this will medicine, be a per=
=fect science. In considering the
different states of fever, I shall first
inquire into its proximate cause,
& this I shall do by reading to you
a few pages in the 4th Vol. of my
Inq: & Obs. beginning at p: 123 &
~~these pages are a text only~~

The natural remedies are the powers of nature - the artificial are taken from the Materia Medica. — I shall consider the powers of nature hereafter. —

In treating on diseases - ~~Arrangement~~ nosology. wished for by Sydenham - began by Sauvage - improved by Vogel - Linnaeus - Sagar & Dr Cullen. — what order shall we pursue? - ~~Nosologists? no - this?~~ ~~because~~ Three modes - 1st Seat - 2 cause or 3d Cure. 1 unnatural - Eg: Throat - Inflm: & dropsy - two of the most opposite diseases. - 2 Best when known - but who can explain the proximate cause of all the nomenclature of diseases? - The 3rd faulty. Eg: ☿ - the remedy of Malignant sore throat & the Vene Disease.

~~Hitherto~~ I have followed Dr Cullen. But find I had myself more responsible for than formerly the manner & matter of a course

The Order I shall pursue in this course of Lectures shall be first to treat upon ~~General diseases - These will include~~ the most prejudicial Fevers - in which I shall include ~~not only inflam: fevers - but~~ fevers ~~from Contagion of any kinds~~ Hemorrhages - exanthematous eruptions & w^t Dr Cullen calls Pyrexiæ -

2 Nervous Diseases.

~~3 Dropsies~~

~~3 of Diseases which affect the Sense~~

3 Of Diseases from effusions of water or Air in different parts of the body.

4 Of Diseases which affect the ~~Skin~~ Hair - Color or ~~figure~~ form of the Skin and external parts of the body.

5 Of Diseases more certainly Local

To these I shall add an acc^t of the diseases of women - Children & negroes - also the diseases of old people - and the diseases mentioned in the Old & new testament. -

Gent.

Having lately seen several Cases of fever
[viz Worton]
in the hospital, ~~treated~~ terminated ~~unsuccessfully~~
favourably, we are naturally led to treat
of that disease. Hitherto you have only
seen or heard the prescriptions, & witnessed
the effects of them upon the patients whose
cases are to furnish our present & several
subsequent lectures. I shall now ~~proceed~~ attempt
to explain the design of those prescriptions,
and the manner of their operating. To
Do this, it will be necessary to enter
fully into the Consideration of fevers
of every kind. This is a fruitful

Subject, & highly interesting to a Stud.
of Medicine — for 2/3 of the ~~fevers~~ diseases
are fevers, & 19/20 of the diseases we
meet with in ~~Country~~ practice, are
febrile Symptoms.
~~fevers~~. ~~I shall begin~~ By fevers I under-
stand all those diseases which are attend-
ded with a quick & ~~in~~ convulsed pulse,
after a chill, fitt — or a coldness of a part,
— ~~a coldness of~~
or of all the body — increased heat, —
~~a~~ an impaired state of the functions
of the body — ~~& a diminution~~ more especially of the powers
of voluntary Motion". To every part of
this definition there are some exceptions.
There are fevers which come on without chills or coldness —
[as the Dumb ague ‡ — there are fevers in
which the heat is either natural, or
below it — and lastly there are fevers

V The causes of fevers are four —

predisposing - remote - exciting, & proximate: I shall illustrate each of them by an example. Debility is the predisposing - heat succeeding cold, or Contagion is a remote — fatigue, or intemperance is an exciting, and a certain state of the (to be mentioned presently) arterial System is the proximate cause of fever. — The Concurrence of ~~all four~~ the 3 causes first mentioned is not always necessary to produce fever, for it may take place without either a predisposition or an exciting cause, but this is seldom the case. —

in which the pulse has no perceptible
frequency ~~and so forth~~ there are ~~cases~~ fevers
in which the pulse is below the ordinary
standard of health as I shall say hereafter.

I shall begin my inquiries upon
this interesting subject with the proximate
cause of fevers. — And here first I must
give you a short account of the changes
which I have made in my opinions upon
this subject. ~~I was educated~~ my first prin-
-ciples in medicine were derived from Dr. Boer-
-haave, and from his expositors so explai-
-ned by Vanswieten I adopted my first ideas
of fever. ~~I was~~ You will easily conceive
of the pains I took to become master of
this subject when I inform you that

before I was twenty years of age, I
abridged in a large quarto volume
all those volumes of vanswieten on Dr Boerhaave's aphorisms wh.
treat of fever, and to this day I retain
nearly every ~~important~~ fact of any conse-
-quence related in that elaborate ~~tedious~~ work ~~lengthy essay~~. I
need not tell you that Dr Boerhaave placed
the proximate cause of fevers wholly in
lentor & morbific matter. —

When I went to Edinr. I ~~was forced~~
~~with reluctance to~~ relinquished this ~~doctrine~~
~~of Dr Boer~~ proximate cause, & embraced
~~the~~ a more rational one first proposed by Dr
Hoffman and afterwards revived with many
advantages by Dr Cullen — I mean the
~~doctrine~~ theory of Spasm. This relieved me
from many of the absurdities of Dr B.

V notwithstanding the practice, & have used it ~~for~~ near 20 years with the ~~great~~ ~~steal~~ success. For in every part of my life, I have constantly made ~~all~~ my theories bend to facts, and not my facts to theories; for I have in all my studies I have pursued truth above all things, ~~& in all things as the supreme good of my life~~. & this I know can only be attained, by making theories bend to facts, & not facts to theories. ——

theory, and for a while I believed Spasm
in the extremities of the capillary vessels
to be the proximate cause of fever.

Soon after my settlement in this
city in the year 1769, I found that this
~~theory~~ did not accord with or explain all
the Phaenomena of fever. ~~But~~ The first thing
that shook my confidence in it was the
efficacy of bloodletting in certain Intermt fevers.
This I at once saw could not be exp^d
upon any of the principles of Dr Cullen's
Theory of fever, ~~and I rejected~~ I adopted
~~Immediately~~ I have mentioned
time, I floundered on
upon an ocean of doubt & Uncertainty
as to the proximate cause of fevers for
many years. Many painful hours have
I spent in contemplating this subject.
at length - Knowledge broke in upon

my mind - and I enjoyed for a while the transports of the Grecian mathematician - But whether - ~~they~~ these transports were ~~so~~ truly founded - must be left to your determination. - One thing - I can say with great pleasure that - since I have adopted the theory I am about to deliver, my practice in fevers has been more successful than it was while I adhered to ~~my~~ former principles. My practice has moreover been attended with less anxiety in the ~~treatment~~ of fevers - for my theory serves as a lamp to ~~guide me~~ guide me in many ~~pain~~ difficulty that occurs in ~~that~~ those diseases. It has moreover served another purpose - it has thrown a light upon the proximate causes of several other diseases.

I ~~do~~ so ~~so~~ full no shame [illegible]

I am the more satisfied with ~~reconciled to~~ my having deserted the theory of ~~Spoon~~ Fyfe of my beloved & venerable master since I have heard that it is deserted by ~~most~~ of his pupils in Britain & Ireland, and that ~~at present~~ it is ~~not~~ no longer taught in the University of Edinburgh. ~~I am of you have been told by the Professor~~

in thus publickly confessing that I ~~saw~~ have ~~disp~~ ~~liable to~~ more than once changed ~~, it mean~~ my opinions. My Objects in ~~all~~ my Studies have been truth, and this ~~time and experience~~ I have long ago, ~~taught~~ been ~~the world~~ can only be attained by reading, thro' a succession of ~~errors~~. To be unchangeable, belongs only to that Being who sees ~~all~~ things in their order & relation to each other by a single act of intuition. ~~An~~ ~~Alteration~~ a change in Opinion, is the necessary effect of a Succession ~~of ideas~~ in the acquisition of new ideas, ~~all additions to our knowledge~~, & I am disposed to believe that no new truth ~~will~~ can ever be acquired, but at the expense of ~~without parting with~~ an old error. ✓

For a refutation of the theory of Lentor being the cause of fever, I refer you to Dr Cullen's first lines.

I object to morbific matter being the proximate cause of fever, Because

~~proximate cause~~ —

~~Beyond~~ Contrary to custom I shall begin w^th^ proximate cause — so most proper — the natural order in the mind — we always begin w^th^ it, before we proceed to remote — occasional — or predisposing. —

We nicety Lister — shall now only enquire whether morbific matter is — D^r^ Boerhaave supposes it is. — ~~Object~~ 1 Fevers brot on by frights & other causes w^ch^ cannot produce matter. 2 They are cured by lightning — Electricity — passions of the mind & things which neither destroy or evacuate it. 3 Fevers are cured without evacuations. Eg Bark. — 4 no acrimony or morbid quality in sweats or sediments in the Urine. are accidental as we shall shew hereafter. 5 Effluvia are of fevers.

the remote causes, not proximate i. —

I acknowledge that I have no ambition to
or improver of a
be the ~~author of a new~~ system of physic. I know
full well how much the change of being an in-
=novator ~~I~~, or a man of genius of speculative
talents, affects both the reputation and
business of a
~~end of time~~. physician. Dr Harvey lost both
by publishing his discovery of the circulation
of the world. But after the declaration I have
made, that theory is not only useful, but
unavoidable, in compliance with the obliga-
=tions I owe to this chair,
=tation to men the means of subsistence
I shall, at the risk of repu-
venture to deliver one, =

Absupes arise from diminished excitement in the extreme vessels — humors for the surface of the body. They are most disposed to stagnate under the ^ occurs in madness, & yet who ascribes madness to morbific matter.

Dr Cullen supposes a spasm on the capillary vessels to be the proximate cause of fever. This is Hoffman's opinion likewise. I object to it being the proximate cause of fever — 1 because it will not explain the phenomena of fever. 2 Because it is a temporary & accidental effect, & not the cause of fever. 3 Because many fevers appear evidently to exist without any such spasm.

I object to Dr Brown's theory of fever because he makes fever to consist in too strong, or too weak exciting powers. — This extends no further than a predisposition to fever — and does not distinguish it from the operation of exciting, or debilitating powers on a healthy body. — I shall proceed to deliver the proximate cause of fever, which has been the result of the inquiries before mentioned.

It has moreover ~~recommended by its~~ the advantage of simplicity to recommend it, for I believe we tend to perfection in all our inquiries in science in proportion as we arrive at single principles. As love is the great principle of activity in the moral and Attraction, in the inanimated natural world, so I apprehend that a principle equally simple, is the only principle of life & activity in the animated world.

V This inquiry will be useful, for all the mistakes & want of success in the cure of fevers are owing to an ignorance of what a fever is, & to are the cause of all y^e^ symptoms which attend it.

In doing this, I shall deliver ~~the~~ a few general propositions.

My first proposition is, that ~~I lay down as a principle~~ y: fevers of all kinds ~~(even wounds~~ except ~~poisons~~) & a few specific contagions depend on general debility: I might go further & add y: all general diseases depend on the same causes so y: disease & debility might be used as synonimous terms. —

Debility is either direct or indirect.

Direct debility is produced by an abstraction of ~~any~~ all such stimuli as produce health & life. Cold which is an abstraction of the stimulus of heat — & hunger w: th

is the Abstraction of the Stimulus of food - also grief & fear which are Abstractions of the Stimuli of joy & hope - all induce direct debility.

Indirect debility is produced by an excess in the application of Stimuli on the body. Heat above 96° or 100°: Labor or Study which induce fatigue - and too much food or drink all induce indirect debility. —

There is all bodies a certain healthy point of excitement. I shall suppose it 40°. — The Abstraction of natural Stimuli by reducing the System below 40 produce direct debility - the encrease of the force of Stimuli by raising the System

V I shall first mention the causes which induce direct ~~the~~ those which induce indirect debility. I shall begin with the first, ~~as~~ such as are direct.

Above two produces indirect debility.
~~this~~ Both these species of debility are
predisposing causes of fever only. They
do not constitute a fever & ~~in~~ in
this I dispute you as from D^r Brown
who makes fevers of too much &
too little action consist wholly
in an excess or deficiency of this
natural excitement.

predisposing
I prove that fevers depend on debility
from this causes. They are 1 Cold.
This is universally acknowledged to be a predis-
-posing cause of fever, & I prove it to be
debilitating. 1 From the languor which
is observed in the inhabitants of cold
countries. This is so notorious that
Dr Wilson in his account of Climates

defends domestic Slavery in cold as well as hot countries. The one ~~by~~ by inducing direct debility — the other by inducing indirect debility produce that degree of indolence & weakness which he says can only be overcome by the Stimulus of the whip. The Dr forgets here that fear — the only principle of action in a slave counteracts by its debilitating effects the Stimulus of his instrument of tyranny! I infer further ½ cold is debilitating from the languid pulse of ½ inhabitants of Greenland. being only 40, or 50 Strokes in a minute.

2 I infer it from astral exp^ts made by a pupil of Dr Brown, —

from the case of a child I saw at the hospital - & from a low & weak pulse being found in one I saw left out bed. — 3 From the prevalence of the Scurvy in cold countries, now Scurvy is universally allowed to be a disease of debility. It acts with most force when combined with ~~debility~~ moisture. — ~~Ths~~ II The usual ~~cause~~ Source of direct debility predispose to fever are the debilitating passions of fear - grief - & despair & the like. —

III a 3rd Source of direct debility is all excessive evacuations, ~~whether of blood~~ by the bowels - blood vessels - pores - or urinary passages.

iv Famine or abstinence from wholesome food.

Let us now attend to the predisposing causes of fever which act by inducing indirect debility. These are

I. Heat excepting in degree. Between 70 & 80 it stimulates & excites to action. Above 90 – it produces languor & debility, more especially if it be joined with & still worse if with moisture. – labor. – Hence the reason why fevers are most common in hot climates & in hot weather in our climate. ——

II Intemperance in eating drinking & venery – This acts by an excess of stimulus overstretching the vessels, and thereby inducing indirect debility. Hence the frequency

of fevers after a fitt of drunkenness
or intemperance in eating — the
plague most frequent & fatal to newly
inspired men.
III Fatigue — This acts by inducing
indirect debility — & is a fruitful
Source of predisposition to fever.

IV ~~Contusions~~ certain causes ch
act by overstretching the whole or a
part of the body — such as lifting heavy
weights — external violence acting
mechanically in wounding — bruis-
-ing — or compressing particular
parts — extraneous substances act-
-ing by their bulk & gravity or gravitation
bruising & the like. ~~In the~~ Some of
these causes act locally — but they
affect the system secondarily by

exciting its indirect debility. +

There are causes ~~which~~ of fever which act without predisposition, such as small pox & measles - Influenza - plague &c - but all these are rendered more dangerous ~~by~~ by the predisposition of fear - fatigue and ~~or~~ other directly or indirectly debilitating causes. ——

There are two species of fever viz from marsh miasmata & human effluvia which are rendered more or less certain & violent in their operation by being more or less accompanied by the predisposing causes that have been mentioned. They all act by ~~their~~

V all the causes of fever act
in proportion as they are combined.
E.G. cold - wind & fear act more cer-
-tainly than either of them seperately.
Heat - fatigue - & intemperance in
like manner when combined, act
with more force than alone. —

first inducing debility ~~either~~ in the
System before the fever is completely
formed — & this leads me to add

2d ~~3d~~. that fevers depend upon generally
debility from the time in which they attack &
the symptoms which
usually introduce them. They generally
come on in the night, — a time of most debility; The
symptoms are — weakness in the limbs —
inability to stand — or walk — coldness
& chills — sleepiness — & during these a shrinking
of the hands & face — and a weak
quick pulse." V

If I lay it down as a 2nd general
proposition that — "Debility ~~whether~~
~~disease~~ is always succeeded by ~~an~~
increased excitability, or a greater
aptitude to be acted upon by stimuli."
This is confined by Dr Brown to

direct debility - but it extends to indirect debility - especially if it be brot on suddenly, in which case the ~~excitement~~ excitability is only suspended but not exhausted. ——

My 12th general proposition is that the diminution or abstraction of one Stimulus is always followed by an increased action of others. — This I taught you in the lectures on animal life. —

Let us now apply these principles to the production of fever

Has the body been debilitated by long exposure to the cold — ? — its excitability is increased — and the heat acts upon it with increased force, — hence the frequency of Pleurisies & other inflammatory diseases

~~The Abstraction of heat~~

2ly

V Has there been an Abstraction of heat by a sudden change in the air, or by a cold night succeeding a warm day?

~~by beginning~~ a fever is frequently excited ~~This~~ is obvious every Autumn in the bilious fevers of this city. The miasmata or contagion act with double force during the debility induced by the cold.

in the Spring after a cold winter
& of bilious & remitting fevers in the
Autumn when warm days succeed
to cold and damp nights. — The
Pleurisy & Rheumatism are
Catarrh are seldom felt for y first
time in the open air, but generally
after the body has been previously
exposed to the cold air, & afterwards
to the heat of a warm room or a
warm bed. — I have frequently
observed Intermittents to acquire an
inflam^y type in our hospitals
in Nov^r & Decem^r — probably from
the stimulus of the heat of our
Stove rooms upon bodies previously
debilitated by cold & disease. —
3. Has the body been debilitated

by fatigue? - Its excitement is diminished, but its excitability is increased in a ratio so much above its excitement - that the stimulus of a full meal - or an intemperate glass of wine often induces a fever if taken immediately after it. — Hence the frequency of fevers in persons upon their return from hunting, - surveying, - long rides, and from a military cam=paign. — A fever from the last cause was very com=mon during the late war. A hot supper, & afterwards the heat of a warm bed, sometimes induc=ed not only fever but a convul=sion of

V This connexion of ~~exsibu~~excitability with debility has lately been pointed out by a French Physician. He calls it "Laxité vibratille". - by which he means a liableness in the system to be thrown into vibrations or motions by the predisposition of debility. There is nothing ~~ran~~ peculiar to animal matter, in this law of our system - we see it in many species of inanimate matter. They become mobile (if I ~~can~~ may be allowed the expression) in proportion to this tenuity. ~~A piece of bl~~ ~~This~~ We see it every day in certain metals - and ~~above~~ all in whalebone & in some pieces of elastic wood which yield to impulse or impression, in proportion as ~~this~~ solidity (which answers to animal excitement)

in the nervous system with it,
in many persons the night after
they returned from the coarse
diet, ~~and bare~~ of the camp, and from sleeping
on the ground or on a floor. The
~~common~~ fever was occasioned by
the suppression of the warmth — but the
in the nervous system
convulsion, by a too sudden ab-
-straction of stimulus from the
softness of a feather bed. —

I could go on, and shew in
like manner that fever in every
case is brought on by increased stimuli
acting upon diminished excitement
& increased excitability.

~~is most~~ is filed away by the hand of an Artist, or worn away by time.

That this vibratility or ~~excitability~~ disposition to motion in animal matter is the cause of fevers, is further evident from their occurring ~~chiefly in infancy childhood &~~ in those stages of life in which it is as most common - as in infancy - childhood - youth & middle life. Fevers are less common in old age - for the vibratility or sensibility, as connected with the arterial system in which I shall say presently, the proximate cause of fever is seated, generally declines in old people - It even lessens in the Skin. 29:

My IV ~~& last~~ proposition is, ~~that~~ the Stimuli which are the occasional cause of fever, act in a manner wholly different from ~~who~~ that in which Stimuli act ~~in~~ on ~~the~~ a healthy body in which there is no predisposition to fever. — In health [or when the excitement is at 40, and the ex=citability neither deficient, or excessive] there is a constant and just proportion between the degree of excitability & excitement, & the force of stimuli. But this is not the case in a predisposition to a fever. The pro=portion between the action of sti=muli and excitement & excitabi=lity is destroyed — and hence the

former act upon the latter with a force that produces irregular action, or a species of convulsion in the system. — When the sys= & its excitability unusually
=tem is debilitated, with fear — dash= a
=ing — or silence — a sudden noise short
occasions a convulsion. ~~in the whole~~
~~body~~. We are apt in the manner in
a convulsion after the accumula=
=tion of our excitability by a sights
slap, from the sudden opening of a door,
or from the fall of a few drops of
water on the face. In short, it seems
to be a law of the system that a
stimulus ~~dispose~~ in an over pro=
=portion to excitability, either pro=
=duces convulsion — or goes so far

V It possess irritability or stimulability
& of course muscular fibres, according to the
experiments of Mr Vasheen - and according
to an observation of D^r Boerhaave who saw it
inflamed - and even its coats black & suffused
with blood in an Ox y^t had been killed viriond^y.
after being violently heated by running
away. The termination of the arteries in
the Skin is demonstrated by the discharge
of arterial blood from a small puncture made
into it - here they are so easily affected by
external Stimuli especially cold & warm air.
vid D^r Haller on the Structure of the

beyond it, as to destroy actionable
=together.

My V prop: is "that the stimuli
which induce the irregular action or
convulsion of fever act primarily on the
sanguiferous & particularly on the
Arterial system. This system per-
=vades every part of the body. It
terminates on every part of its
surface, ~~etc~~ in which I include
Lungs and alimentary Canal
as well as the Skin. This action
in the Arteries is excessive or deficient
according to the power of
the stimulating causes.
The excessive action is produced
by unequal excitement. Hence we
find the ~~pulse~~ strength
& action of the heart & arteries

arteries & veins who speaks in three planes [p: 14 · 21. 32 · Cullen's edition] · in terms directly to our purpose · –

My VI proposition is, that there is but one fever in the world · However ~~Strange it may sound~~ Yes – I repeat it again – ~~This is to~~ However different the predisposing – Remote, & exciting causes of fever may be – whether ~~heat sound~~ direct or indirect debility – whether marsh or human miasmata, – or heat succeeding to cold – whether – a full meal, or a fright – Still I maintain that there is but one fever in the world · Thus fever is the same whether from frightening, friction, perusion, or ordinary fare · – Of the Unity I found this proposition ~~opposed~~ of fevers upon their having only one proximate cause · ~~It is important~~ to the multiplication of fevers [illegible] of

is increased, while the stomach-bowels and muscles exhibit marks of a continuance & even of an increase of debility. The remains of the excitement of the whole body as it were appear to be concentrated in the arterial system. Here we behold evidently the debility, and excitement in different parts of the system. I shall explain the cause it hereafter in accounting for the symptoms of fever by the principles which I have delivered. ~~In the mean while I~~ I shall now proceed to deliver the proximate cause of fever.

done great mischief in the world. It is founded in ignorance. I have called it the paganism of medicine. neither Neptune nor Eolus, neither Pluto nor Prosirpine have any thing to do with my system of fever. It is an Unit, and all the numerous names which have been given to its different grades and states, I consider as modifica=tions only of one simple disease, seated originally in the sanguiferous or arterial system. I shall proceed now to describe this disease or in other words to mention the proximate cause of fever.—

My VII proposition is which follows from the two last is, that as all fever is seated in the arterial system, it follows of course that all those local diseases

Having proved that Debility is the predisposing cause of all fevers, not excepting those of the most inflam^d kind, I proceed next to deliver the proximate cause of fevers.

This I take to be "an Irregular Action in the Arterial System accompanied with excess or deficiency of force in the moving powers."

— not irregular determination

— Between the excess and deficiency of action in fevers there is a certain intermediate State of action compounded of both. — It is called partial excitement by Dr Cullen "Asthenic Inflam^n" by Dr Brown I shall call it typoid action.

I have called the action of the Arterial System in fevers irregular to distinguish

in the world

which are connected with primary fever, should be considered as its symptoms only, ~~united of being viewed as~~ and not as original diseases. — Eg: a pleurisy + an angina — an hydrocephalus internus — an inflam: of the Liver — Stomach & bowels — when con-

---

+ It is observable after the crisis of a fever during convalescence.

~~nected with primary fever~~ ~~connected with an original~~ are all ~~for~~ ~~except when~~ they ~~arise from local stimuli~~ nothing but Symptoms of a morbid State of the arterial System. This view of ~~febrile diseases~~ fever Gent: turns all our old Systems of Physic upside downwards. — It ~~is as requires~~ involves in it, as great a breach of all ancient associations of ideas in medicine, to adopt it, as the principles of democracy produce in minds accustomed to

it from that cause deficiency of Action which takes place after violent exercise in the former, and after fatigue, or ~~after~~ ~~the~~ any debilitating power in the latter & which constitutes Dr Brown's proximate instance. The Action of the Arteries here in the case of fever. when felt in the pulse is regular, and affords a very different perception to the mind from that which we feel in the pulse of a patient labouring under a fever. —

I repeat it again that ~~in fevers~~ this irregular Action in the Arterial System in fevers, is in other words nothing but a convulsion in the Arterial System. — It appears to be seated in the muscular fibres of the Arteries.

That this is the case I infer from the

in the world

monarchy & aristocracy in Govern[t].

Having delivered my preliminary propositions, I proceed next to inquire into the proximate cause of fever. — turn back to p: 29. —

V I shall briefly enumerate ~~the~~ all the instances of this analogy between a fever, and a convulsion in the nervous system.

1 Do convulsions depend upon previous debility? - So ~~does~~ does a fever.

following considerations.

1 a Fever is preceded by Debility. Now debility always precedes Convulsions. —

2 From the Sensation excited by the pulsation of an Artery in a fever. It is accompanied with that jerking, which attends convulsions. —

3 From the great Analogy between a fever and a Convulsion in the Nervous System. — V

2 Do tremors precede convulsions in the Nervous System? and are they the first degree of them? So they are of fevers.

3 Do a coldness in the extremities

in the world

post mortem of the —

20 32

the 2nd symptom of convulsion in the nervous system? — So ~~they are~~ it is of fevers.

4 Are convulsions in the nervous system attended with alternate action & remission, so they are in ~~the tetanus system~~ fevers. —

5 Do convulsions ~~also~~ of the nervous system return at regular & irregular periods? — So do fevers. —

6 Do convulsions in the nerv: system under certain circumstances impair the functions of the brain? So do fevers. —

7 Are convulsions in the nerv: system attended with excess & deficiency of irregular action? — yes — they are ~~this~~ [illegible]

(9) Are certain nervous diseases particularly Convulsions followed by immobility of the limbs+? Is ~~this~~ one fevers - This I have seen after Typhus - & Dysentery, & ~~Convulsions~~ ~~of it~~ after the small pox. - It is in all ~~the~~ hysterics a favourable Sign. -

(10) Are there certain nervous diseases which affect the limbs, without affecting the functions of the brain such as Chorea - Catalepsy &c.?

+ Miss B Eyres's case.

33

prove ~~hereafter to be~~ case)(24) the former ap=
=pears in Hydrophobia, & in the first stage of
Tetanus - the latter in Hypocondriasis &
Syncope. The same extremes appear in
fever - as in Rheumatism or Pleurasy,
& in the typhus mitior. —

8 Are there are intermediate degrees of
action in the convulsions of the Nervous
System. Yes - there are - they appear in
~~Epilepsy &~~ Hysteria. - So there are in
fever. (These intermediate degrees of
action in fever are in the typh^d. fever or ~~synochus of~~
fever of mixed action to be explained hereafter.) V
D^r. Cullen. ~~[illegible]~~

+ From all these facts & analogies I do
not ~~to~~ hesitate to ~~admit~~ decide y^t: irregular action or a convulsion in
the arterial system ~~to be~~ is the proximate

So there are ~~of~~ fevers - particularly all
Hectics which seldom produce head ach,
or delirium. & frequently do not confine
a patient to his bed. —

11 Are convulsions most apt to occur
in Infancy? so are fevers.
12 are persons once affected with nervous
convulsions apt to have them frequently
thro' life? — so are persons affected by
fevers - witness Intermittents, which often follow
thro' life - in all climates & seasons.

13 Are there local convulsions as of the
hand - foot - fingers - eye lids &c —? So there
are local fevers - as in the intermitting fever
called formalcontra - local Inflam^n &c.
14 Is the Strength of the nervous system
encreased by convulsions? so is the

cause of fevers. —

Nature is simple and frugal in all her operations. She never makes use of two instruments to accomplish that which she can effect by One. — As the predisposing cause of all general diseases is One, so is the proximate cause. — [go to p: 36 =] [Nor is irregular Action or convulsion ~~confined to~~ the agent of disorder in the Animal body alone. — It extends thro' all Nature. The natural moral, and political worlds every where exhibit marks of ~~irregular Action or con-~~ it. ~~vulsion~~ deformity Hurricanes - earthquakes - vice - misery - tyranny - and slavery are all the effects of irregular action. — They are all deviations from the Order which was imposed upon them

Strength of the Arterial System by certain fevers & hence we justify bloodletting in some of them - for this Strength can be reduced frequently in no other way - It exists, while every other part of the body exhibits signs of debility. —

15 Do convulsions go off gradually from the nervous system ? as in tetanus Hydrophobia & Chorea Sancti Viti ? - So they do from the Arterial System in certain fevers.

16 Do convulsions go off suddenly from the nervous system ? So they do frequently from the Arterial System in fevers - by profuse sweats or hemorrhages - frequently in a night - sometimes in a single hour. —

17 Do we observe certain convulsions to continue constantly without impairing the vital faculties, or without destroying the powers of walking &c [as in Bennet &

the Universe, when it came first from the hands of its creator. —

Let us next inquire what are the exciting causes of this irregular action or convulsion in the animal system.

To obtain a correct idea of these causes we are either indirect, or direct stimuli. —

The indirect stimuli consist in the abstraction of impression. Silence, and darkness excite motions in the system only from the absence of sound & light.

I said formerly that there existed in every animal body, excitement and excitability. They are frequently changed into each other. E.g. A man apparently dead from drowning,

V Hence exciting causes produce fever when there has been previous debility, which would have made no impression upon the System in its usual & natural state of excitement.

V. I have some doubt. I wish I could know if there could be no fever without direct stimulus. - May not the ~~Contracting~~ Obstructing matter ~~circulation~~ formed in the extremities of the arteries by the debility of fever & grief become acrid & stimulate the System into irregular or febrile action? -

the whole excitement of the system is con-
verted into excitability. In the tonic mad-
ness, nearly the whole excitability of the system
is converted into excitement. In the debi-
lity which precedes fevers there is a dimi-
nution of excitement, but there is with
it a proportionable increase of the exci-
tability of the system. V

That the absence of stimulus; or that
debility alone will induce fever without
any direct stimulus, I infer from the effects
of fear - and grief upon the human body.
They both appear to produce fever without the interven-
tion of stimulus of any kind. But of this I V.

This disposition or principle in the system to
right itself, or to restore its equilibrium
has been ascribed by Dr Stahl to the anima
medica, & by Dr Cullen to the vires naturæ

Medicatrices. — But this principle is devoid not only of intelligence, but possesses no healing power of any kind. It appears to be the blind effort of matter; and is as much the effect of physical necessity, as the falling of a stone when thrown into the air, or the direction of a plant towards the sun when confined in a green house. I not only object to the power, but to the names which has been given to this blind and physical Agency of nature in diseases. Instead of a better term I shall call it, the conservative nature, or the self preserving power of nature. —

The existing causes which act directly in producing fever are chiefly heat — Spirituous and fermented liquors — and external violence. — Heat is the principal existing cause of inflammatory fevers. This I prove

part only of the

26

by the following facts. go to No 1. p: 172

From p: 317. — blank side

This gentleman is a short Acc[t]: of

part only of the

my theory of fevers. — You will oblige me by examining every part of it with the utmost severity. If it be not well founded the sooner it is overthrown the better, but if it be, provided in reasonable parts I hope it will lead to more simplicity in the cure of fevers that has hitherto been proposed. ~~was by Dr Brown~~. I beg leave to add, that the further history of the different kinds or to speak more accurately, of the different Degrees of fevers and their method of Cure which I shall deliver hereafter will lead to many facts which will tend to establish the proximate cause which have been mentioned. This principle of irregular action or convulsion in the nervous system was hinted at by Dr Cullen under the term of reaction in one disease only, but it is wholly denied or overlooked by Dr Brown, & hence the principal defect

Col: Stones case?] ? So we do in fevers as in the hectic of consumptions. —

18 Do we observe certain nervous convulsions to affect some parts of the nervous system with more force than others, or in other words do we observe marks of preternatural strength or excitement in one part of the nervous system attended with marks of preternatural weakness or a defect of excitement in other parts of the same system? — So we do in the arterial system in fevers. The pulse in the wrists is often tense while the heart is weak, & acts with a diminished force — There is moreover sometimes Delirium from too much force in the blood vessels of the Brain, and a deficiency of force in the blood vessels arteries of every other part of the body. 19 Is there rigidity in nervous affections as in Catalepsy? Something like it in fevers when pulse is 160.

In a word - Gent: as virtue consists in

1st Does debility

or an ~~external~~ a part only of the

Nervous System produce General

Convulsions - as in Tetanus?

2. Does debility on the

whole Surface ~~of the~~ or on an ~~external~~ a part

~~the body~~ only of the Arterial System,

produce general fever.

2d Does Palsy succeed Convulsions?

it does never - as in dissolved blood &c.

= In a few words - my ideas of

~~Inflam~~ fever may be reduced to a Chain

consisting of four ~~infin~~ links. -

1 ~~Debi~~ predisposing debility, or weak-

=ned excitement. 2 Increased Excitat:

3 Stimulating powers, especially

heat & 4 irregular action or

Convulsion in the Arterial System. or

harmony, ~~to~~ health consists in Order, and as Vice consists in the Absence of harmony, so disease consists in a Want of Order - hence it is frequently & very properly called Disorder - Irregular or convulsive action whether excessive or defective, ~~or convulsion~~ or whether it be seated in the Arteries - nerves. Alimentary canal, or brain - is nothing else but ~~the Absence~~ Abstraction of the natural Order of motion. go to p. 33 + This idea might be extended much further ~~and all the~~ so as to include all the moral & physical disorder of the ~~Universe~~ world. It is nothing but irregular all or deranged motion, ~~or convulsive action~~ for Order was the first law of heaven, and of course the first state of the Universe. †

go back to p. 33. +

Let us next inquire, how far the principles I have delivered will accord with the symptoms of fever. and I shall speak of fevers generally & II of particular species or states of fever.

I In all fevers there is more or less pain in the head - breast & joints. This arises from the unequal distribution of blood - from the irregular or convulsive action of the heart & arteries.

2 Thirst arises from an obstruction of blood from the fauces - hence a diminution of secretion and excretion, ~~in~~ & of a course an atony of the vessels ~~of~~ of the throat - that thirst is

v Costiveness by a deficiency
of blood and action, from the
bowels. ——

induced morbid excitement by ~~Atony~~ Opium I infer from its being used to ~~Sleep~~ — both of which either directly or indirectly restore ~~to~~ excitement.

The white & dry tongue, are occasioned by the Obstruction of the usual Secretion on y: Organ.

a vomiting - & Dyarhœa are often brot on by a preternatural determination of blood to the Stomach and bowels - hence they are both to often relieved by Sweats & blisters.

The dry Skin & partial Sweats both depend upon unequal action of the vessels which terminate on y Surface of the body.

The high coulored and pale Urine on the excessive or deficient action

V Exquisite Sensibility to light & found on
excessive excitement. —

Its scanity, or increased quantity or ~~of~~ too
of the arteries of the kidneys; ~~too~~
little ~~much~~ or too ~~little~~ much blood being sent to them —
The increased heat shall be explained
hereafter. ~~Also partial~~ heat and Cold:

~~In short every thing that~~

Delirium — or too much, or too
little action in the vessels of y brain.

In a word — every phenomenon of fever
shews irregular action or convulsion in
the arterial system — and in consequence
of it, an unequal distribution
of the blood to every part of the body.

~~Let us next attend~~
~~I to the symptoms of inflam fever.~~

But what is the cause of the chilly
fitt & spasm on the surface of the
body which introduce a fever? They
both appear to be accidental concomitants of

V a chill symptoms seems ~~to be inseparable~~ equally to attend ~~from~~ indirect, and direct debility. Hence it attends the beginning & end of fevers. It occurs even without fever when the system is indirectly debilitated, by fatigue or by contagion. I shall hereafter mention many other particulars in which the symptoms of direct & indirect debility meet in a point.

fever. ~~debility~~. The chilly fitt is generally the first ~~symptom~~ symptom of action in fever. — hence Dr Lind remarks that where Death occurs in the fitt of an intermittent there is no chill. where death occurs in the last fitt it is from excess of action. — It is remarkable that the chilly fitt seldom appears in its full force, till the patient approaches a fire, or lies down in a warm bed, for in these situations the action of the ~~body~~ arterial system is ~~heat~~ promoted by heat. V

The ~~chilly fitt~~ Spasm on the nerves which terminate on the surface of the body, is occasioned by the recess of the blood from the capillary Arteries;

have been

Fevers ~~are properly~~ divided into continual - Remitting. They have been further divided into Inflam^{y}. - Bilious - putrid - ~~and~~ nervous or ~~pure~~ Typhoid, and typhus. ~~Perhaps it would~~ considering how ~~be more proper to call these designate them~~ much mischief has been done by the mechanical attachment of Physicians to these names, I shall ~~by the names of the~~ call them Inflam^{y} Bilious - ~~putrid~~ Typhoid - and typhus states of fever - ~~For~~ we ~~seldom~~ seldom find them in a simple state. ~~This~~ Instances are not wanting of our ~~finding~~ meeting with all these different states or conditions of the system in the same fever. Here ~~first~~ let me arrest your attention to an important principle, ~~in any system of Physic &~~ that is - to know no disease by its name - Before you prescribe for it - make it shew its face - or in other words - find out the exact State or condition of that part of the system in which the disease is seated as to excitement, and excitability. ~~in or which the disease is seated~~

and hence they contract mechanically like any other soft tubes which are emptied of their contents. It is no more a proximate cause of fever than the thirst - restlessness - or high coloured Urine which usually attend fever. The weak pulse during the chilly fit - by the spasm of the vessels of the blood inwards. Let us next attend to

to the symptoms of particular species or states of fever, & examine how far they agree with our proximate cause. V Synocha state condition of Inflam: fever. In this fever The arterial system there is an excess of irregular action. This depends upon the remote causes of inflam: fever - all of which tend to impart vigor to that part of the

lystem. These are plentiful and
nourishing aliment & violent exercise
or labor – To both these, ~~the~~ cold air
~~stimulates~~ contributes, – for when moderate, it
increases the appetite, – & every one
knows that in all its usual degrees
in cold climates, it prompts to constant
labor or ~~exer~~ exercise of the body. – From
the operation of these causes, it is
probable the texture of the Arteries
becomes more dense & compact, &
more capable when brot into a
convulsion of violent & durable
excitement. –

~~Those~~ These remote causes seldom act
Until they are accompanied by fatigue,
~~Which~~ which brings on the predisposing debility.

but this is not sufficient of itself to bring on Inflam. & fevers — action in the Art. System, for in Russia & Sweden where all the remote causes frequently, the predisposing cause operate during a long winter, inflam. & fevers are Unknown. The same remark applies to Canada in North America. The stimulus of heat is necessary to act upon the ly ex-citability of the system which has been accumulated by the debilitating effects of cold — hence inflam. & fevers occur in those countries very rarely & that only in the Spring. They occur more frequently here, but chiefly in variable Less winters & Springs

of inflam. fever

Besides the causes which have been enumerated – it is often produced by certain contagions acting as stimuli upon the arterial system. – But even these contagions are greatly influenced by the heat – cold fatigue – & quality & quantity of aliment formerly mentioned.

when the body is frequently exposed to the stimulus of heat, after its excitability has been enhanced by debilitating effects of the action of cold.

So far the remote & predisposing causes of inflam. & fever help us to account for excess of action in inflam.? But we often find ~~this excessive~~ fever in habits that have not been exposed to ~~these~~ remote causes which have been mentioned, - as in women of delicate habits - in consumptive patients - and in persons who have been debilitated by a long continuance of intermitting fever, & other causes of direct debility. — The excitability in these systems is

Phlegmon.

such as pneumony, Rheumatism,

V The local inflammations which occur in some ~~dis~~ general fevers, & which I said formerly are nothing but symptoms of a disease in the blood vessels, are occasioned 1 by local debility in the part affected - 2 by encreased excitability in the part, in consequence of this debility, 3 by encreased & morbid excitement induced in the part, by the stimulus of distention from the blood, and by an effusion of serum ~~&~~ or red globules into the weakned, & afterwards inflamed part. Here you see I admit the reasonings of Dr Bastia are in accounting for local inflam.n - By combining this principle with predisposing debility & morbid

~~predacity~~ always great in proportion as excitement is small — hence they are more easily affected by the debilitating effects of cold, & the stimulating effects of heat. — It is remarkable that the inflam^y ~~diathesis~~ action in these habits in less acute & violent than in persons of more robust habits. — But it is sometimes more obstinate — hence tho' they bear less copious — they require more frequent bleedings, or a longer continuance of other sedative or debilitating remedies than persons of robust habits who have fed plentifully & used great exercise in cold weather. V

excitement, the secret of inflam[n] is
laid open, and made as plain, as any
of the most simple operations of nature.

16

[From the history I have given of the remote & predisposing causes of inflammation in persons of such opposite habits, you must now be convinced that it arises alike from direct, and indirect debility.] —

But the question - why excess of action, or fever in the Arterial system should succeed debility ~~in any part~~ of a part or of the whole body, and be connected for days & weeks with debility in the muscles - nerves - brain - & alimentary canal, remains yet to be answered. I shall attempt it by directing your attention for a few minutes to the operations of nature in other parts of her works. —

go to No 8. p. 313 - to 317. —

From the analogies I have mentioned, it is evident that excessive and convulsive action in the arteries induced by general, or still connected with partial debility, is no deviation from the general laws & operations of nature. — In short — I repeat it again — I consider the excitement & excitability of the whole system as absorbed by the blood vessels, and hence we find the inability to perform any of the natural functions of the body to be universally in proportion to the degree of excess in the action of the arterial system. I except here the case where an

V I consider the cure of a fever whether by nature or art, as no: = thing but the restoration of the excitement and excitability of the system to an equilibrium or an equable diffusion of blood to every part of the body.

inflam^y fever produces a strong delirium. Here the nervous system is affected, and a new disease viz madness from fever is brot on. But of this – hereafter. V

In this explanation of the cause of excess of action in inflam^y fevers you see the absurdity & danger of Dr Brown's opinion that excitement is uniform in all diseases. A Disease is the reverse of this, – it consists in most cases of divided excitement. of this I shall give you many proofs in our lectures especially on Pathology. ~~my lectures~~

But what shall we say of ~~these~~ that state of inflam^y fevers in which there arises

The same thing occurs in the plague & in several other contagious Diseases. It occured in many cases in the yellow fever both last, & this year in this city. Sometimes the pulse is ~~subject to~~ preternaturally slow & intermitting. I ~~answer those~~ explain these phenomena ~~questions~~ by remarking that the ~~weak~~ states of the low ~~pulse~~ slow & intermitting pulse are all occasioned by the immense

no excess of action 49 ? Dr Cullen calls ~~them~~ them Chronic, and Dr Michaelis calls them slow inflammations ? Dr Grier of Jamaica has described it very accurately in a species of Plurisy which often occurs among the negroes in that low Island. He says the pulse is so weak as not to be scarcely perceptable ~~if~~ ? if there is no heat attends it. V

I answer that

In the former case I suppose the inflammation to be local, & that the whole system is not brought into sympathy with it. In the latter case related by Dr Grier I suppose the excitia pain & in the case of contagious stimulus to be so intense or the stimulus of the contagion the so great, as to induce indirect debility — hence the absence of heat,

force of the stimulus of pain, or contagion acting upon the ~~heart, and~~ brain & heart. That this is the case, I infer ~~th~~ from there being ~~in~~ instantly removed in many cases by the abstraction of stimuli — particularly by purging & bleeding. — I wish for a name to distinguish ~~this~~ that malignant state of inflam^d fever in which this depressed pulse occurs, from the hypocha pulse which is common in Rheumatism & Pleurisy. — I have called it in my Ax^s of the yellow fever — a "sulky pulse"! one of my pupils called it this year more properly "a locked pulse". —

& the languor of the pulse. I have
& contagious diseases
seen Phrenesies, with the same
symptoms - & have found with dra
Genius the heat & pulse rise by V.S.
- It acts by abstracting those
degrees of stimulus which produced the
indirect debility. I shall hereafter men
tion other instances of the abstraction
of excess of stimulus, producing action
in the system.
commonly called
or in that State of febrile action in which bile is discharg
2 In the bilious fever, and in all other
fevers (not inflam.) attended with exc
=ss of action - the same principles
which have been mentioned will
explain the cause of the excessive
action
action which takes place
in the arterial system. The stimulus

seldom
these fevers are of
long duration from their not having been preceded by the strong exciting powers which produce the common state of inflam: fever. I hope to shew hereafter that the discharge of bile, & the occasional inflam: of the liver which take place in the bilious fever are produced by a specific determination to the liver of the marsh miasmata. — go on — to 3d

in those fevers is no ~~different from~~ ~~inflam~~ ~~it is frequently~~ from marsh ~~or~~ ~~human~~ effluvia – or ~~specific~~ contagion, generated from it. —

Where these fevers occur with symp=
=toms of deficiency of action in the
Arterial System, – it is owing to long
continued ~~rem~~ predisposing & exciting
causes ~~bringing on a deficiency of ex~~
wasting the excitability of the System,
or to the force of Stimuli bringing
on indirect debility. ~~which~~ Sometimes
the force of these stimuli is so great
as to induce not only indirect debi=
=lity, but instant death by sudden=
=ly destroying the excitement of the
System. —

~~2 In the Synochus of Dr Cullen there~~

V 3dly ~~Lastly~~ what is the state of the Arterial System in what ~~Dr Cullen calls the typhous pyrexia~~ what is commonly called a putrid fever? I answer that ~~in most cases~~ no putrefaction can take place in the blood in the living state, & y: the symptoms which are ~~which is~~ supposed to be the effects of putrefaction are the effects of a sudden - violent - & rapid inflammatory action in the Arterial ~~Symptoms~~ System - ending & tearing the blood vessels in some instances ~~into~~ in every part of the body. This idea I borrow from Dr Sydenham, who justly ascribes haemorrhages in putrid fevers to a weakness & rupture of the Vessels & not to a putrid dispot.n of the blood - for they often happen when the blood is dense & viscidity. What is called a putrid fever is only the highest possible degree of inflam.y fever. The symptoms of weakness languor &c are all the effects of indirect debility ~~& only~~ induced on the System ~~& supported by the symptoms~~

cups of irregular ~~action~~ inflam^d^ action in the begin-
ning & deficiency in its close. The
reduction of the excessive action is effected
either by medicine, or by a waste of
excitement from the continuance of
action.

4 In the Typhus ~~fever~~ State of fever there is general
deficiency of action, in the arterial system.
But it is still
irregular or convulsive. It sometimes arises
original disease, but it more
frequently succeeds the inflam^d^. or
bilious, pleurisy. When it succeeds
the former, it is called Typhus mitior
by Dr Cullen. The pulse
in both cases is generally weak
& ~~quick~~ quick but I have often felt it

+ Dr Stubbs ~~&c~~ in the philosophical Transactions describes a putrid fever ~~&c~~ in the west Indies attended with the same symptoms. It is likewise taken notice of by Bergaficha in his history of the Plague - by Sobait in his his acct of the Plague & of the malign[t] Sore throat - & by Boate's description of the Irish ague in his nat[l] history of Ireland. They all consider this slow pulse ~~&c~~ very improperly as a mark of the absence of fever.

V It seems to answer to the rigidity which we sometimes observe after Spasmodic affections in a part or the whole of the nervous system - In these cases the irregular contractions in the muscular fibres are ~~perfectly natural~~ suspended by the equal action of antagonist muscles.

~~but little quicker~~ more frequent than natural ~~in beats~~ & in ~~some three of the worst cases of typhus occasion~~ ~~the worse~~ I have found it as low as 48 & 44. strokes ~~I once saw it but only 60 pulses~~ in a minute. + What could this symptom be owing to? — is it to a torpor induced upon the arterial system by the action of the contagion? or is it owing to the stimulus of the contagion being in that proportion to excitability as to produce a temporary fever in the arterial system? I shall hereafter ascribe the slow & full pulse which succeeds the use of Opium wholly to its stimulus on the arterial system. V

* The typhoid state of fever is composed of the inflam. & typhus state of fevers.

It is the nervous fever of Dr Huxham. It is evidently a disease of divided excitement. The muscular fibres of the ~~arteries~~ arteries appear to be excessive in ~~one~~ this action in one part & deficient in another of the system. Eg: ~~there~~ There is often too little action in the heart, & too much in the Arteries — But I have suspected further that there ~~are~~ is in this fever opposite actions in the muscular fibres ~~which~~ of the Arteries which we prep with our fingers. ~~I think I have often felt so~~ Supposing a pulse to consist of eight cords, I think I have frequently felt ~~only~~ more

~~This species of fever~~ It derives its name from the nervous system the brain being more or less affected in it — hence delirium — tremors — convulsions & even insania called Typhomania by Dr Cullen in its last stage.

— Its last stage is generally Typhus.

This ~~species of fever~~ change into simple typhus often occurs about the 15th day. —

or less of them times according as
the fever partook more or less of
the inflam^{y}: or typhus action. —
I think this pulse is the cha-
-racteristic of the Intermittent fever —
The Scarbitina — and of Hectic fever.
This state of fever is the most difficult
of cure of any that have been men-
-tioned, — Return to p: 8. N° 6.

The Intermitting state of fever is a disease
in which remote & predisposing
causes evidently produce debility.
— The action which occurs in it is
generally excessive — hence Bark is so
hurtful when given during the
fitt. It differs from all others

9th: There is the Sebricula & the Lutri fever.
In both these - patients are able to walk
about. In these cases, the disease affects
the arterial system only with convulsion,
without bringing, the brain - nerves - or
muscular system, or the alimentary canal
into sympathy - 10th complications of fevers
with gout - hysteria & typhoid
There are fevers which in
the beginning are typhus - typhoid
& even intermittd: which in the
course of 3 - 5 - 7 - 10 or even 15
days assume an inflam[matory] type -
How shall we explain this? Why
from some new stimulus - such as
a full meal - heating drinks -
stimulating med: as Bark - or Land[anum]
improper exercise - heat succeeding
cold - or some internal congestion being
added to the system. go up to +9th
Fevers of all kinds, tend to

fevers in ~~a putrid~~ being of a thoroughly
exation. Its is occasioned not only
by miasmata - but cold, - hence
its recurrence in the Spring when
there is no exhalation. The return
of the paroxysms is said to be occasioned
by the recurrence of debility. - I shall
~~by the reaction~~ would rather ~~assribe~~ ascribe it to association.
is of two kinds. viz: ideas & motions.
The return of intermittents seems
to be occasioned by the associations
of motions. — more of this hereafter.
all ~~Intty~~ fevers intermittents.
I should now have proceeded to
~~treat~~ of the remote causes of fevers,
- but they will come in more pro-
-perly in the Pathology. I shall at
at present only examine them over
again. —

the destruction of the system in one ~~of~~ of the 3 following ways. 1 By the destruction of some of the viscera whose functions are necessary to life, by effusion - distention - or laceration from the impetus or gravity of the blood, or the excessive action of the vessels which terminate in them. 2 By the alteration in the quality of the fluids which renders them unfit for the purposes of the animal life. Whether this alteration consists in putrefaction this is not the place to enquire. 3 By simple debility without any organic affections of the viscera, or change in the fluids. The two first often ~~constitute their influence~~ unite in destroying the system.

They are 1 cold. 2 Heat. 3 Intemperance in eating, drinking & venery. These produce intermd: Bilious & fatigue. 5 Marsh Effluvia. 6 Hu= Yellow fevers =man effluvia, - either engendered in the body - or taken from others, - in the first case, they are called contagious. 7 Fear - 8 Grief, 9 Specific Contagions as small pox - measles - plague - Typhus &c to certain stimuli acting upon the external, or internal parts of the body. —

We proceed now to the cure of fevers. We shall begin w Intermd: - and first - by mentioning the Symptoms which distinguish them from other fevers. [See 27 of N°i opposite side]

They are 1 cold and heat acting alternately on the body.

nearly all fevers

Dr Sydenham ascribes ~~the greatest~~ ~~chiefly~~ to this cause - particularly to leaving off winter cloathes too soon, ~~&~~ or exposing the body to cold, after being heated. These two sources of fevers he adds destroy more than the plague, sword, or famine. Wal. Edit. Vol. 1. p. 357.

The fevers produced by ~~the~~ cold are ~~generally~~ ~~often~~ accompanied by an ~~pleurisy rheumatism~~ inflam: in the lungs called pneumony - or by an inflam: in the throat called Angina - or by inflam: in the joints called Rheumatism. - ~~Sometimes~~ these fevers are without any topical inflam:

2 Intemperance in eating, drinking & venery. -

3 marsh miasmata. These produce intermitting, remitting, bilious &

yellow states of fever. They propagate themselves under certain circumstances by Contagion.

4 Human miasmata. They produce the Jail fever — the Influenza, and the plague, each of which is after=wards propagated by Contagion.

5 certain Specific Contagions as the small pox & measles. — the Scarlatina — the Anginosa, & the Angina maligna. which [illegible] or

6 certain depressing Passions as grief & fear. Dyness in cows.

7 certain Stimuli acting upon the external, or internal parts of the body. —

I proceed next to treat of the cure of fever. ——

~~The~~ I shall begin with the inflam^{y} state of fever. — The following appears to be the order of inflam^{y} diathesis in the system in diff^{t} fevers.

1 The Plague.
2 The yellow fever
3 The small pox. - querc mal: S: throat?
4 fever from cold &c appearing with the symptoms of pleurisy - angina - Rheumatism & occasionally Gout - or pulmon^{y} consumption
5 The measles.
6 The catarh from cold & Influenza from contagion.
6 The common remitt^{t}. bilious fever - appearing sometimes in the symptoms of Colic & Hepatitis, Dysentery & Hydrocephalus internus.
7 The Scarlatina - purpurile & hectic fever.

~~the inflam~~ state of

V The Remedies for ~~fever~~ ~~in the~~ ~~first stage~~ consist in the Abstraction of Stimulus by

I Evacuations. These are

1 Bloodletting.
2 purging.
3 Vomiting
4 Sweating.
5 a Salivation.
6 Blisters

II. The Abstraction of Stimulus of

heat by. 1 Cold Air } ~~of foods~~
2 Cold water }

of food by 3 Abstinence. of
of ~~light~~ light by 4 Silence - Darkness -
of impressions by 5 moderate fear. & sometimes by hope
of acrimony by 6 Diluting drinks - 7 cleanliness -

III Sedative. Medicines - as

1 Nitre. ~~Sal~~ Glauber Se
Sal: Sat: Digitalis. Oil

I shall first make a few remarks upon each of the above Remedies, and then apply them to cases of

5 The Jail fever
6 The malignant ~~fever~~ Sore throat. 2
10 The common mild Intermittent.

You will remember that the degree of inflam^y action in each of the above ~~fevers~~ is much varied by season & climate - Of course the order I have adopted is subject to an occasional variety. —— V

9 ~~The~~ Plague is the most inflam^y of all diseases. It depends ~~upon~~ ~~in~~ a ~~excess~~ force of stimulus so great as sometimes instantly to extinguish life, but more frequently to prostrate all the active powers of the system, & ~~also~~ to destroy the organization

of the viscera, and to produce Dilatation &
of the ~~skin~~ vessels
ruptures ~~& effusions~~ which termi-
nate on the skin & in the Lymphatic
glands - hence the frequency of
petechia - abscesses - Bubos &c in
this disorder.

~~& the yellow fever~~

will be viewed in the same light that the coasting voyages of the Ancients have been viewed by the Moderns since the discovery and use of the magnet in Navigation. I have met with several facts which lead me to entertain this opinion, one of which only is ripe for communication, and it is this — I have lately heard that the Indians in this Country, cure a Pleurisy (a disease of the lungs in flam^y action) by Inspiring themselves, for sometime, by the Steam of the effects of Liquor upon the limb of a tree, or upon a beam in y^r cabins. This Excitement is taken down & excitability roused at the same time, & from one of the effects of Cold Air in flam^y fevers I am of opinion that our troops today, we are prepared to

But again informs us the was
v Capt. Cook's ~~Acct~~ of ~~himself~~
~~being~~ cured of an infd Rheuma-
-tism by hard frictions in one
of the friendly Islands which he
visited. The frictions agitated his system
violently, but they ~~are~~ removed his
disorder perfectly in four & twenty
hours. —

confide most in a remedy which produces that twofold operation. I throw these hints out for your future consideration ~~; and~~ Perhaps it may lead to the discovery of more ~~beg that it may be remembered that~~ ~~I consider the debilita~~ facts of a similar nature which may help to establish ~~the practice~~. a more speedy and simple mode of curing inf diseases.

Fact from Wm Penn's letter in Sir Jno Flower

exposed to ~~strong~~ exciting ~~causes~~ powers. (for re-
-mittents happen usually in Autumn) they
are soon accompanied by a defect of ~~action~~,
hence they are apt to be of a mixed nature,
& always tend to typhus or nervous fever.

In the Intermitting fever there is strong
irregular
~~regular~~ action, & a speedy solution of the fever
only because the System is free from the
influence of those causes which produce
~~a~~ tension in the Arterial System, or
inflam^d Diathesis.

In the Typhus mitior ~~& still more~~ there is
a small degree of irregular action, but much regular defect of
~~& irregular~~, but a greater defect of

In the Typhus gravior there is most frequently a total
deficiency ~~defect~~ of any kind action - hence it sometimes
proves fatal in its first attack, & hence
it sometimes appears without a
chilly fitt. The absence of a chill in-
-dicates the utmost debility, & the most
passive State of the ~~self preserving~~ principle

V Before we proceed to the cure of inflam^y fevers it will be necessary to lay down the marks or signs which distinguish them from the fevers that have been mentioned. These are taken

1 From the remote & predisposing causes - taken from quoted Cullen - especially previous Cold & heat. This includes a regard to the Season, & the prevailing epidemic

2 From the Symptoms - to pleural pain - most frequently - & of the sides or Shoulder - or breast - contrary the absence of Vomiting - very often afford a presumption of the existence of inflam^y fever

3 From the age & constitution of the patient The young & athletic being most subject to inflam^y fevers. -

4 From the previous habits of the patient with respect to disease. A man died in 1788. of his 34th fit of a pleurisy. I have attended Wm Lewmen in his 27th or 28th fit.

5 From the Country, or late place of residence of a patient. we are creatures of habit as well as of habit, & the effects of it are transported with us to foreign Countries An American in London will

of Nature. —

V

Let us now attend to the cure of

Inflam^y fevers. In these I include Peripneumony - Rheumatism - Inflam^y Angina - the inflam^y Small pox & measles - Inflam^y Catarrh - & ~~most other topical~~ Inf^s bilious & yel. fev^s of Dr Cullen's & lastly Synocha - or the simple Inflam^y fever. I consider them all as primary diseases of the whole system. The lungs ~~are~~ throat are affected in the peripneumony - angina & catarrh, only in consequence of their being a continuation of the inflam^y effusions of those parts of the body. ~~They~~ are the consequences only of a general affection of the system. ~~Often~~

I know that doubts have been entertained whether there can be a simple inflam^y state of fever without topical affection. I am hesitated upon this subject - but I am now satisfied that it can & does exist - having seen many distinct cases of it

Before we proceed to treat —

the loss of 4 times ~~the~~ more blood y^t: a citizen of Lond
Of this I saw an example in Capt. Lawrence's
- the history of this case merits ~~death~~ deserves probably in
January. It may be useful to Southern practi
when called to visit new settlers from the
= thern States. — This Observation may be extend
ve Hillary - as the ~~in~~ & swelled leg comm
after Intermittents in Barbadoes. The first co
in London w^th in Barbadoes, & I once saw the 2^d
a maid brot from Barbadoes by a genteel fa
in this city. — 6 The previous Season &c
¶ The chief ~~mark~~ distinction of Inflam^y Fever is to
taken from the Pulse. It is hard - jerk
& generally full. But is often hard - with
much fulness. A very quick pulse should be suspected o
being connected w^th inflam^y Diathesis. To enable us to judge of
pulse the follow^g circumstances should
attended to. see p: 113: of N^o 4. —
(4^th) The pulse should be felt with the fi
- never with the thumb - seldo
with the fingers of one hand only. A
= ving to enlarge this perception like Nisi[illegible] &
wanted. (2) Different positions of the body - as lying

of the usual remedies in Inflam.ry fevers, two very important questions ~~Questions~~ are to be answered. —

1 ~~Is it possible to~~ Are there any marks by which the approach of an inflam.ry fever may be known, & 2dly are there any means of preventing it? — I answer yes. — To predict the approach & thereby to prevent the attack of diseases is a much neglected part of medicine. There are few natural evils in the world, which have not their harbingers, and I believe most diseases have their precursors, or premonitory signs. — Frightful dreams precede the internal dropsy of the brain — Costiveness, & ~~short~~, small stools precede the Dysentery. & burning in the palms of the hands, & a quick pulse in the evening often appear three months before the cough which ushers in the Consumption of the lungs. & pain in the back & coldness

Two gentlemen now in this city [Dr. Wallis, & Dr. Vaughan's clerk] I believe that they can tell when they are about to be indisposed by having recourse to their tobacco.

the sides & back - Setting ups - Standing ups - Ap
=mity to affect all influence the pulse. —

(3) Different states of the System as Sleep (&c) - a full a
- & previous Aliment & drinks. —

(4) Passions of the mind - such as hope - fear
& the exercise of the Understanding -
=ger &c - Sh never be felt soon after a Phy
=cians enters a room, nor ~~after~~ should
judgement be formed of it after Dr. has d
recommended. —

(5) Different positions of the Arm influen
the pulse - Sh^d always be free from prepa
pronation best - fewest muscles then act

(6) The state of Sensation in a physician
being different in different postures, he x shou
always ~~[illegible]~~ feel it in the
same. Setting is best. ~~[illegible]~~
he will find an advantage in compen
~~[illegible]~~
=trating his sensations by commanding
silence, & even shutting his eyes. By

(a) Pulse is 1/3 slower in the morning -
is slower in <u>sleep</u> than in waking -